## **Exhibit E**

Exhibit 4.6

TYCO INTERNATIONAL GROUP S.A.

TYCO INTERNATIONAL LTD.

SUPPLEMENTAL INDENTURE NO. 7

\$400,000,000

6 1/8% Notes due 2009

THIS SUPPLEMENTAL INDENTURE NO. 7, dated as of January 12, 1999, among TYCO INTERNATIONAL GROUP S.A., a Luxembourg company (the "Company"), TYCO INTERNATIONAL LTD., a Bermuda company ("Tyco"), and THE BANK OF NEW YORK, a New York banking corporation, as trustee (the "Trustee").

## WITNESSETH:

WHEREAS, the Company and Tyco have heretofore executed and delivered to the Trustee an Indenture, dated as of June 9, 1998 (the "Indenture"), providing for the issuance from time to time of one or more series of the Company's Securities;

WHEREAS, Article Seven of the Indenture provides for various matters with respect to any series of Securities issued under the Indenture to be established in an indenture supplemental to the Indenture; and

WHEREAS, Section 7.1(e) of the Indenture provides that the Company, Tyco and the Trustee may enter into an indenture supplemental to the Indenture to establish the form or terms of Securities of any series as permitted by Sections 2.1 and 2.4 of the Indenture.

## NOW THEREFORE:

In consideration of the premises and the issuance of the series of Securities provided for herein, the Company, Tyco and the Trustee mutually covenant and agree for the equal and proportionate benefit of the respective Holders of the Securities of such series as follows:

Unless this certificate is presented by an authorized representative of The Depository Trust Company, a New York corporation ("DTC"), to the Issuer or its agent for registration of transfer, exchange, or payment, and any certificate issued is registered in the name of Cede & Co. or in such other name as is requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Unless and until it is exchanged in whole or in part for Notes in definitive registered form, this Note may not be transferred except as a whole by the Depositary to the nominee of the Depositary or by a nominee of the Depositary or another Depositary or by the Depositary or any such nominee to a successor Depositary or a nominee of such successor

TYCO INTERNATIONAL GROUP S.A.

6 1/8% Note due 2009

No. 2

\$200,000,000

CUSIP: 902118AJ7

TYCO INTERNATIONAL GROUP S.A., a Luxembourg company (the "Issuer"), for value received, hereby promises to pay to CEDE & CO. or registered assigns, the or agency of the Issuer in the Borough of Manhattan, The City of New York, in shall be legal tender for the payment of public and private debts, and to pay be payment of public and private debts, and to pay be payment; provided, however, that if an Interest Payment Date would otherwise be a succeeding Business Day but no additional interest shall be paid in respect of said principal sum at said office or agency, in like Coin or currency, at the from the most recent Interest Payment Date would or interest on rate per annum specified in the title of this Note, from January 12, 1999 or duly provided for until said principal sum has been paid or duly provided for. 30-day months. For purposes of this Note, "Business Day" means any day other New York are authorized or obligated by law, regulation or executive order to be closed.

The interest payable on any Interest Payment Date which is punctually paid or duly provided for on such Interest Payment Date will be paid to the Person in whose name this Note is registered at the close of business on the January 1 or July 1 (in each case, whether or not a Business Day), as the case may be (each, a "REGULAR RECORD DATE"), immediately preceding such Interest Payment Date. Interest payable on this Note which is not punctually paid or duly provided for on any Interest Payment Date therefor shall forthwith cease to be payable to the Person in whose name this Note is registered at the close of provided for on any Interest Payment Date therefor shall forthwith cease to be payable to the Person in whose name this Note is registered at the close of business on the Regular Record Date immediately preceding such Interest Payment Date, and such interest shall instead be paid to the Person in whose name this Note is registered at the close of business on the record date established for such payment by notice by or on behalf of the Issuer to the Holders of the Notes mailed by first-class mail not less than 15 days prior to such record date to their last addresses as they shall appear upon the Security register, such record date to be not less than five days preceding the date of payment of such defaulted interest. At the option of the Issuer, interest on the Notes may be paid (i) by check mailed to the address of the Person entitled thereto as such address shall appear in the register of Holders of the Notes or (ii) at the expense of the Issuer, by wire transfer to an account maintained by the Person entitled thereto as specified in writing to the Trustee by such Person by the applicable record date of the Notes.

Reference is made to the further provisions of this Note set forth on the reverse hereof. Such further provisions shall for all purposes have the same effect as though fully set forth at this place.

This Note shall not be valid or become obligatory for any purpose until the certificate of authentication hereon shall have been signed by the Trustee under the Indenture referred to on the reverse hereof.